October 2008 Report
for the
Utah Legislature

Prescription Pain Medication Program
Utah Department of Health
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I. Introduction

During the 2007 General Session, the Utah State Legislature passed House Bill 137, Pain Medication Management and Education. The bill established a two-year program in the Utah Department of Health to reduce deaths and other harm from prescription opiates utilized for chronic pain.

The Prescription Pain Medication Program has been established in the Utah Department of Health in collaboration with the Utah Attorney General Office, the Labor Commission, and the Division of Occupational and Professional Licensure (DOPL). A Steering Committee has been established to provide oversight of the program. In addition, an Advisory Committee with several active workgroups on specific issues has been established to help coordinate with related initiatives and programs.

The Program goals are to:

- Reduce the number of deaths due to prescribable pain medications by 15% by 2009 by educating providers, patients, insurers, and the public.
- Improve understanding of occurrence of deaths related to prescription pain medications and understanding of prescribing patterns and other risk factors that increase risk of death.
- Provide recommendations regarding use of the CSDB to identify risks and potentially to prevent deaths due to prescription pain medications.

Funds were contributed by the Labor Commission, University of Utah's Research Center for Excellence in Public Health Informatics, and the Worker's Compensation Fund of Utah resulting in a first year budget of $500,000. For Fiscal Year 2009, funds have been contributed by Division of Substance Abuse and Mental Health, Labor Commission, and Commission of Criminal and Juvenile Justice resulting in a budget of nearly $600,000.

II. Executive Summary

Utah Clinical Guidelines on Prescribing Opioids
Clinical guidelines on prescribing opioids are in their final draft form. They will be open to public comment for a period of 30 days prior to publication. Anticipated publication will be November 30, 2008.

Provider Education
Provider Education is being done through small group trainings, large group presentations, and mass mailings. Provider Education is being conducted by HealthInsight. They are on target of meeting all the goals in their contract.

Statewide Media Campaign
A Statewide Media Campaign was launched in May with the slogan "Use Only As Directed". TV and radio spots have aired throughout Utah. Collateral materials in the form of bookmarks, posters, clings (re-usable stickers), informational pamphlets, and newspaper ads have been developed and distributed throughout the state. We have generated a lot of press coverage and have had multiple interviews with the press on the topic of prescription drug safety. The website, useonlyasdirected.org, has been an effective way to provide the general public with detailed information. Our campaign awareness week will take place on October 20-26, 2008.

Research Initiatives
Throughout FY 08, meetings were held by the Prescription Pain Medication Program's IT and Research Team to identify research initiatives. A new research project was designed to examine risk factors associated with overdose deaths involving prescriptions. This research will take place

at the Office of the Medical Examiner. Other research will include looking at emergency department visits related to overdoses of prescription medication. We are developing a systematic way of identifying the cases of interest to us through Death Certificate and Medical Examiner data. We have brought together a team of talented individuals to work on this topic. Infrastructure to enable analysis of the Controlled Substance Database was established, including an agreement with Department of Commerce, a secure server, and technical approach to linkage of the database to Medical examiner and death certificate data. Initial results of those analyses are included in this report.

Research Findings

The number of non-illicit drug overdose deaths continues to increase slightly, although it has been more stable in the past 3 years than in previous years. The number of emergency department encounters involving opioids has also continued to increase from 2000-present. In 2007, the average age of people who died strictly of non-illicit drugs was 39.5 yrs with 56% being male. These deaths occurred in 11 of the 12 Healthy Districts across the state showing that the problem impacts both rural and urban communities.

III. 2007-2008 Milestones

2007

July
- Utah State Legislature passed House Bill 137 appropriating funding to the Utah
- Department of Health (UDOH) to establish a program to reduce deaths and other
- harm from prescription opiates.

September
- Convened Advisory Committee of over 50 individuals (meets quarterly, open to public)

October
- Convened Steering Committee of 11 individuals (meets monthly)
- Convened Patient and Community Education Work Group (meets monthly)
- Convened Policy, Insurance, Incentives Work Group (met monthly through April)

November
- Convened Data, Research, and Evaluation Work Group (meets as needed)
- Issued report on findings of analysis of Controlled Substances Database (linked with Medical Examiner and Death Certificate data).
- Memorandum of Understanding signed between DOPL and UDOH for access of Controlled Substances Database
- RFP (Request For Proposal) sent out for Media Campaign contract

December
- Media Campaign contract awarded to Vanguard Media

2008

January
- Baseline survey conducted for Media Campaign
- Applied for and received grant from Utah Commission for Criminal and Juvenile Justice for educating general public

February
- Focus groups conducted to provide feedback on Media Campaign logo and TV spots
- One-year plan for Media Campaign established
- Awarded contract for presentations to general public with producers of Happy Valley

March
- "Use Only As Directed" campaign logo created
- IRB submitted for research using CSDB and ER data

April
- Radio and TV spot developed
- Completed literature review of existing guidelines
- IRB submitted for research of risk factors of those who die from prescription-related overdose (done by interviewing family members of decedents)

May
- Data from CSDB sent through secure line to UDOH server
- Held "Use Only As Directed" campaign kick-off at the Capitol

- TV spot aired
- Convened Guidelines Expert Panel to develop Recommendations for guidelines

June

- Radio spot aired
- Cancelled contract with producers of Happy Valley
- Awarded contract for physician education to HealthInsight

July

- Convened Guidelines Tool Panel to select tools to include in guidelines
- Finalized guideline recommendations from Guidelines Expert Panel
- Began distributing collateral material for “Use Only As Directed” campaign

August

- Began physician education/small group presentations
- Hired research analyst for CSDB data
- Hired research coordinator for risk factor study

IV. Program Progress Reports

A. Utah Clinical Guidelines on Prescribing Opioids

As part of the legislative mandate for HB 137, the Prescription Pain Medication Program was asked to create Utah guidelines on the proper prescribing of opioids.

Purpose and Target audience
The guidelines provide recommendations for the use of opioids for management of pain that are intended to balance the benefits of use against the risks to the individual and society and to be useful to practitioners. The target audience is all clinicians who prescribe opioids in their practice.

Guideline Evidence Review
The steering committee of the Utah Department of Health's Prescription Pain Medication Program developed the key questions, scope, and inclusion criteria used to guide the evidence review process. The process began with a complete literature review for existing guidelines on pain, chronic pain, opioids, pain management, and related topics. Investigators identified and evaluated 40 separate guidelines. Guidelines were identified through electronic databases, reference lists from evaluated guidelines, and recommendations from experts. Electronic databases that were searched include: PubMed, Medline, CINAHL, and the National Guideline Clearinghouse.

Grading of the Evidence and Recommendations
As guidelines were identified they were reviewed for key information. They were evaluated based on the following categories:

- Title
- Year Published: Guidelines were included only if they were published after the year 1999. Articles published before 2000 were merely noted in the grid by their title and date with no additional information.
- Sponsorship and funding
- Medical Perspective
- Target Audience
- The Process: This describes how the guidelines were created. Most guidelines fell into two categories: "evidence-based" and/or "consensus".
- The Rating Scale: This was based on the quality of research that went into the development of the guidelines (See Appendix A). Each guideline was given a rating from 1 to 10. Explicit evidence-based guidelines received higher ratings and less explicit, consensus-based guidelines received lower ratings.

In total, 40 guidelines for pain management were reviewed and evaluated. As each guideline was reviewed, it received a rating from 1-10 (for a breakdown of the rating scale, see Appendix A). Guidelines that received scores of seven (7) or lower were excluded. Four (4) sets of guidelines received scores of eight (8) or above. Three public health professionals reviewed the ratings given to ensure that the scores given were consistent with the rating scale.

Panel composition
The Utah Department of Health convened two multidisciplinary panels (See Appendix B for complete list of panel members). The Guideline Recommendation Panel convened on four (4) occasions between May and July 2008. Their purpose was to review the evidence and formulate recommendations based on the evidence in the selected guidelines. Each member signed a Conflict of Interest disclosure. No conflicts were reported. The Guideline Implementation and Tool Panel met twice (2) between July and August 2008 to review the recommendations to ensure that

they were implementable as well as to identify tools needed in order to put the recommendations into use. The first panel consisted of twelve (12) experts and the second consisted of nine (9) experts from throughout the state of Utah.

Recommendation Development Process
The guideline recommendation panel met in person on four occasions between May and July 2008. The purpose of the first meeting was to provide panel members with copies of the selected, high-scoring guidelines and to present the purpose and plan for developing the guidelines. Prior to the second meeting, panel members were asked to review the four guidelines for commonalities. The recommendations that were supported by multiple guidelines created the basis of the first draft of the recommendations used by the Guideline Recommendation Panel. Consideration was given to adopting one of the existing evidence-based guidelines outright, but the panel felt that no single guideline represented sufficiently what was desired of the Utah guidelines. The panel voted to include two (2) additional sets of guidelines that had not met the inclusion criteria for consideration while drafting the recommendations. In total, content for the Utah guidelines was drawn from six (6) guidelines. The key topics to be developed into specific recommendations were posted on a website where the guideline recommendation panelists posted comments and edited the text. The panelists' postings were the basis on which content was selected from the chosen guidelines. This content was then used to create a draft of actual recommendation statements and supporting paragraphs. At the third meeting, a straw poll was taken on the recommendation draft. Through discussion and rewording, consensus on content was achieved for all of the recommendations discussed over the course of the two meetings. Outside the meetings, non-content editing of the recommendations and supporting statements was performed, based on the panel's discussions, to create the final draft of the recommendations and supporting information.

Tool Development Process
The Guideline Implementation and Tools Panel met in person on two occasions between July and August 2008. Prior to the first meeting, a book was compiled that included all tools that were identified in the forty (40) guidelines. Sample tools were solicited from panel members as well. In total, the workbook contained forty-seven (47) tools. At the first meeting, the panel reviewed the draft recommendations and discussed whether any specific recommendations were impossible or burdensome to implement. Panel members were each given a book containing all the tools. In between the first and second meeting, panel members reviewed and graded each tool according to usefulness and whether or not it should be included in the guidelines. Votes and rating were tallied prior to the second meeting. Tools that received an average rating of below two (2) were eliminated. At the second meeting, the remaining tools were discussed and it was determined which of the remaining tools should be included, modified, or eliminated.

Completion and Distribution
Following the final panel meetings, Utah Department of Health staff formally drafted the complete guidelines document. The guidelines are anticipated to be ready for publication by October 31, 2008. They will be distributed through HealthInsight, who we have contracted with to conduct provider education.

Summary of Recommendations

Opioid Treatment for Acute Pain
1) Opioid medications should only be used for treatment of acute pain when the severity of the pain warrants that choice and after consideration of other non-opioid pain medications.
2) When opioid medications are prescribed for treatment of acute pain, the number dispensed should be no more than the number of doses needed based on usual duration of pain for that condition.
3) When opioid medications are prescribed for treatment of acute pain, the patient should be counseled to store the medications securely, not share with others, and to dispose of properly when the pain has resolved to avoid their use for non-medical purposes.

Opioid Treatment for Chronic Pain
1) A comprehensive evaluation should be conducted before initiating opioid treatment.
2) Consideration, including adequate therapeutic trials, should be given to alternatives to opioid treatment before initiating opioid treatment.
3) The provider should consider and screen for risk of abuse or addiction prior to initiating treatment.
4) A treatment plan should be established that includes measurable goals for reduction of pain and improvement of function.
5) The patient should be informed of the risks and benefits and any conditions for continuation of opioid treatment, ideally in a written and signed treatment contract and plan.
6) Opioid treatment for chronic pain should be initiated as a treatment trial, usually using short-acting opioid medications.
7) Regular visits with evaluation of progress against goals should be scheduled during the period when the dose of opioids is being adjusted (titration period).
8) Once a stable dose has been established (maintenance period), regular monitoring should be conducted at face-to-face visits during which analgesia, activity, adverse effects, and aberrant behaviors are monitored.
9) An opioid treatment trial should be discontinued if the goals are not met and opioid treatment should be discontinued at any point if adverse effects outweigh benefits or if dangerous or illegal behaviors are demonstrated.
10) Clinicians should consider consultation for complex pain conditions, patients with serious co-morbidities including mental illness, patients who have a history or evidence of current drug addiction or abuse, or when the provider is not confident of his or her abilities to manage the treatment.
11) Methadone should only be prescribed by clinicians who are familiar with its risks and appropriate use.

B. Provider Education

HealthInsight was awarded the contract for provider education based on their extensive background in provider behavior change in Utah and their status as Utah's Quality Improvement organization. The HealthInsight Provider Education Intervention is part of the State of Utah's two-year program to reduce deaths and other harm from prescription opiates. This education will be done through community-based meetings in both rural and urban communities to discuss safe pain medication use and prescribing habits. Meetings will be conducted with primary care providers in 10 rural communities and 20 meetings with primary care providers along the Wasatch Front. These will be supplemented with 12 presentations to larger physician audiences, use of telehealth for video presentations, articles in physician newsletters, partnering with Intermountain and University of Utah's physician education programs, and outreach activities involving pain specialists.

Recruitment
HealthInsight's strategy for recruiting participants and selecting venues and formats for the educational sessions requires a balance between effectiveness and cost efficiency. In recruiting providers, HealthInsight will use existing relationships with primary care practices and rural hospitals to schedule presentations during regularly scheduled physician meetings. Previous experiences with physicians have shown that attendance is highest when the educational sessions are made a part of regularly scheduled physician meetings. After scheduling the meeting customized mail, email and telephone invitations will be sent to all target physicians in the communities. The invitations will include detailed instructions for accessing a list of their own patient on control substances from DOPL and a request that they generate that list before the presentation.

As an alternative venue to disseminate this project's message, additional meeting will be scheduled as presentations during grand rounds, web cast grand rounds and physician conferences or large physician groups (e.g. Intermountain and University of Utah, described in more detail below). While less effective for engaging physicians, we may also use telehealth for one-on-one video meetings with groups of rural providers when scheduling onsite meeting is cost prohibitive.

Interaction/content delivery methods
The educational sessions will be presented by a team comprising one pain expert, a primary care provider and a HealthInsight clinic facilitator.

At the educational sessions attendees will be provided with:

- Comparison data available on the practice, community, state or national level; including death rates
- Guidelines and a tool box of resources including patient education forms
- Advice on how to use the DOPL Controlled Substances Database to identify problematic patients or their overall prescribing patterns, e.g.
  - Identifying patients with possible unsafe combinations of medications
  - Examining overall pattern of prescribing against "average" patterns
  - Identifying patients for whom prescribing might be altered given the guidelines presented and calling them in for visits, adjusting treatment
- Referral options for addicts, mentally ill and long term users
- Information on the how to access further assistance from HealthInsight
- Offer access to peer experts for follow-up questions via email or telephone

After the sessions, providers will be contacted individually to determine whether they need additional information or assistance. They will also be asked whether they have implemented systems changes or other improvement activities based on this topic (and the types and nature of these changes and activities); whether they have used the patient education materials and whether they have accessed and used the Controlled Substances Database.

Individual practice level process redesign consultation, while very effective, is costly. We will incorporate practice redesign concepts and specific instructions at the end of the clinical presentations with access to follow-up assistance via telephone. Each practice in the target communities will be contacted the month after the presentation and interviewed to find out whether they have been able to access their patient list from DOPL and institute changes into their care processes. Any clinical question will be referred to a physician expert. We will also distribute the presentation materials to any non-attendees, followed by a phone call to make sure that the materials were received and to offer short one-on-one education via telephone from peer experts. Additional follow-up contact six months after the presentation will assess their continued use of suggested practices.

Feedback on the education session and materials will be systematically collected and reviewed to improve the product.

Supporting education dissemination strategies
Statewide activities to support the core intervention will be undertaken to increase the physician audience exposed to the education.
Four strategies to be included are working with Intermountain and University of Utah to influence them to include this in their provider education, as well as having this topic discussed at the Utah Medical Association (UMA) annual meetings and in articles published by the UMA.

Data Collection system
HealthInsight will contribute process measures on presentation penetration, satisfaction with training, intent to change behavior, and engagement in implementing care process changes.

For evaluation of this project HealthInsight will collect data on, analyze, and present to the committee written reports on:

- Number of providers reached by location, specialty, and status (retired, active, full-time, etc.) also as a percentage of the provider population in each target county. Data captured will include the frequency, duration of intervention activities each provider is exposed to including education sessions and any follow-up.
- Provider evaluations of educational sessions content and understandability
- Follow up calls with these providers at one month and six months to identify and track process measures:
  - Did they create and are they using the DOPL list of their patients?
  - Have they changed their prescribing practices? If so, how?
  - Are they using the patient education forms?
  - Have they requested additional support to incorporate process changes in their practice?
  - Have they contacted the clinical content experts with additional questions?
- Process measure collected will also include:
  - How many practices implemented systems changes or other improvement activities based on this topic (and the types and nature of these changes and activities)
  - How many accessed their DOPL data and how they used it
  - How many used the patient education materials and if they plan to continue to use it
  - How many self-report changes in their prescribing patterns and a description of those changes
  - Any anecdotal qualitative information shared by providers will also be captured and reported.

Data Analysis
The evaluation reports will be provided as monthly data updates on activities listed above, narrative report at quarterly meetings, and in a year-end project summary report including final budget.

HealthInsight will submit a final report to document the completed work including: time and extent of intervention with each provider location, feedback from providers, lessons learned to be considered for incorporation into future project phases, and any significant deviations from predicted to actual budget.

HealthInsight analytic staff will coordinate with UDOH Prescription Pain Medication Program (PPMP) to investigate changes in pain medication morbidity and mortality in the state over time. The rural intervention communities may be able to be compared to rural communities where the intervention does not take place, if there are any. Due to the limited number of annual cases in each community it is not expected that statistically significant reductions in mortality directly attributed to this arm of the PPMP project will be detectible in the first year of the project. Use of emergency department discharge data may increase the ability to detect a decrease in risk due to the increased number of events included (non-fatal overdose events)

We are on our target for setting up, scheduling, and executing the physician education sessions (see **Table 1,** below).

Barriers and Solutions

1. Experience to date has shown that very few physicians are doing the pre-work and going into the DOPL CSDB to run their reports before the meeting. HealthInsight is creating a letter and additional instructions that they will attempt to fax and email to participating providers.

2. In some instances, the CME coordinators for the rural hospitals insist on total control of materials to and from the physicians and limit outside invitations so HealthInsight is not able to invite physicians from neighboring rural areas. This decreases HealthInsight's ability to send reminders and additional instructions and impacts attendance.

3. Although having the ability to earn a considerable amount of CME is attractive to physicians, it is arranged in such a way that it is hard for the physicians to understand and the presenters take 5-10 minutes of the talk to explain. The letter, mentioned above in #1, will hopefully clarify this.

4. The original plan called for the initial physician follow-up interviews to take place one week after each presentation. HealthInsight found that most of the physicians had not done anything at that point so the follow-up interview was changed to one month after the presentation.

5. HealthInsight has had difficulty getting to the physician on the phone for the follow-up interviews so they are creating a survey monkey form that physicians can use as well as allowing them to fax or email back the survey. They will still initially try for phone interviews as they are potentially a richer source of feedback.

6. The delay in the guidelines and tools somewhat hampers the physician presentations. We look forward to integrating them more as they are finalized. In the meantime HealthInsight has created a one page "Pocket Guide" on the main points in the talk that physicians can use in their office.

7. The presentations have been generally very well received. One physician had a concern about the availability and coverage of sleep studies. Another physician wanted more focus on short acting opioids as he rarely used the long acting ones.

8. Below are comments taken from the meeting evaluations:

   What was found useful about the presentations:
   a. Updated information about methadone
   b. The six "cautions"
   c. The guidelines and tools
   d. Information regarding number of deaths per week/year

   What might be improved about the presentations:
   a. Continue with ongoing discussions
   b. Easier to access DOPL database
   c. Well done already
   d. Provide additional info on CI, SE of long/short acting opioids

Table 1: Provider Education Activities (Completed and Scheduled)

PPMP Primary Phase – Scheduled Meetings									
Rural Req=10	**Urban Req=20**	**Other Req=12**	**Presentation Location**	**City**	**Date**	**# Invited**	**# Attended**	**# Doctors (MD, PA, Etc.)**	**# Other (Pharm., DDS, Etc.)**
1			Sevier Valley Medical Center	Richfield	8/7/2008	25	9	7	2
	1		Utah Academy Family Physicians	Midvale	8/28/2008	~15	8	8	
		1	Medicaid Chronic Pain Group	Salt Lake City	9/15/2008	16	10		
	1		St. Marks Family Medicine	Salt Lake City	9/18/2008	14	12	12	
1			Four Corners Behavior Health	Price	9/23/2008	~50	20	10	10
1			Gunnison Valley Hospital	Gunnison	9/25/2008	16	9	9	
		1	Lakeview Hospital-Grand Rounds	Bountiful	10/2/2008	~40	16	16	
	1		Exodus Healthcare	West Valley	10/17/2008	21			
1			Sanpete Valley Hospital	Mt. Pleasant	10/22/2008	9			
1			Allen Memorial Hospital	Moab	10/23/2008	22			
		1	UMA Women's Conference	Salt Lake City	10/23/2008				
	1		Health Clinics of Utah	Salt Lake City	10/30/2008				
	1		Davis Hospital & Medical Center	Layton	10/31/2008				
1			Mountain West Hospital	Tooele	11/4/2008				
1			Central Valley Hospital	Nephi	11/7/2008				
	1		U of U - Greenwood	Midvale	1/21/2009				
		1	Ogden Surgical Society	Ogden	5/13/2009				
		1	Orthopedic Society Meeting	Deer Valley	9/25/2009				
7	**6**	**5**					**84**	**62**	**12**

PPMP Pending Articles - UMA and Other									
			Publication Name	**Date Due**					
			UMA Bulletin	11/1/2008					
			UMA Bulletin	3/1/2009					

C. Statewide Media Campaign

Vanguard Media Group was awarded the contract to develop the Prescription Pain Medication Program Media Campaign. Through bi-weekly meetings with Vanguard and the Prescription Pain Medication Program, much progress has been made toward educating the general public about the dangers of prescription pain medication and how to use these medications safely. The campaign slogan is “Use Only As Directed”.

Production of Television Spot
During January and February of 2008, focus groups were conducted to determine which ad concepts would have the best impact on the general public. Vanguard Media Group was able to identify the ad concept that was later used to produce the initial television spot. The script for "Long Nap" was taken and refined by Vanguard Media Group, then reviewed and approved by the Prescription Pain Medication Program. The 30 second television spot was then produced during the month of April.

Television Air Schedule
In April 2008, Vanguard Media Group worked with the local television stations to identify the station that would provide the strongest air schedule for the campaign. After receiving and reviewing the proposals from each television station, Vanguard Media Group recommended spending $25k with KSL-TV (Channel 5) and $20k with KSTU (Fox 13). The air schedule began on May 5, 2008 and continued through the end of May 2008. The following breakdown highlights the final elements (reach and frequency) that were delivered.

KSL-TV ($25k) – Final report
The following information outlines the results from the completion of the air schedule in May 2008. KSL fulfilled their negotiated and contracted responsibilities.

• KSL ran 66 of the 71 bonus spots as part of the added value element of the contract, which aired during the specified programming.
• KSL ran the 30 second television spot on Weather Plus during the month of May 2008.
• The booth space at the KSL Family Fair was used to place a chalk outline of a body and a large sticker highlighting that prescription drugs killed more people last year than motor vehicle crashes.
• The tile ad was placed on the Web site under the KSL-TV tab and linked users to the campaign Web site, and KSL reports that there were more than 62,500 views to the KSL TV page where the tile ad was placed.
• The rotating banner ads did run on KSL.com, totaling 52,236 impressions during the month of May, with a total of 73 click-throughs (.13% click-through rate).

The total reach and frequency for the air schedule on KSL, without including the bonus television spots, came to 49.4% (Reach) with a frequency of 2.4 times. When the bonus spots are added in to the schedule, the numbers are 64.2% reach and a frequency of 2.8. This indicates that **about 426,638 people between the ages of 35- 54 saw the television spot a total of 2.8 times** during the month of May. These numbers indicate that KSL-TV fulfilled their end of the contract.

KSTU TV ($20k) – Final report
The following information outlines the results of the television air schedule that ran on KSTU (Fox 13).

• Fox 13 ran 38 bonus spots using the 15 second television commercial provided by Vanguard Media Group. There were 87 paid television spots that ran during the flight.
• A television segment on Fox 13’s Good Day Utah aired on June 9, 2008 at 7 a.m.

The final report from KSTU combined the added value schedule along with the paid schedule. The numbers were reported as follows for the target audience of Adults 35- 54: Reach – 33.9%; Frequency: 6.1. Using the numbers, it is calculated that **about 225,000 saw the television spot 6.1 times.** These numbers indicate that KSTU fulfilled their end of the contract.

The television spot was recently translated into Spanish and is currently airing on a local Spanish television station.

Production of Radio Spot
Using information acquired during the focus groups, the concept that best fit to the key messages and worked for a radio spot was Poison Control Center. Following the initial development of a more detailed script, the script was forwarded to Barbara Crouch, director of the Utah Poison Control Center to assure that the spot sounded like something that would actually take place. Following her review, the radio spot was produced and ready for use by the launch of the campaign on May 1, 2008. A copy of the radio spot can be found in the Press Room of the Web site, useonlyasdirected.org.

Radio Air Schedule
KSL Radio (102.7 FM and 1160 AM) $7,500 – Final report
The following information outlines the results from the completion of the radio air schedule which ran in July 2008. KSL Radio fulfilled their negotiated and contracted responsibilities.

- KSL ran the 74% match in bonus spots (equal to 26 bonus spots), which is what was contracted on this portion of the added value. These spots also aired during the specified programming and within the contracted period.
- The rotating banner ads did run throughout KSL.com, totaling 35,000 impressions during the month of schedule, with a total of 92 click-throughs (.26% click-through rate), which is more than twice the national average for click-through rates (0.1%).
- An e-mail blast was sent to 230,000 subscribers on Thursday, July 10, 2008, which provided information about the campaign and linked people to the Web site.
- Bookmarks were also provided to KSL Radio, who distributed them at their booth at the 24th of July Parade, as well as other KSL Radio remotes and events.

The radio spot, Poison Control Center aired a total of 61 times. The total reach and frequency for the radio air schedule on KSL, including the bonus radio spots, came to 21% (Reach) with a frequency of 5.1 times. This indicates that **about 101,000 people between the ages of 35- 54 heard the radio spot a total of 5.1 times** during the two-week air schedule. These numbers indicate that KSL Radio fulfilled their end of the contract.

KSFI Radio (100.7 FM) $7,500 – Final report
The following information outlines the results from the completion of the radio air schedule which ran in July and August 2008. FM100 fulfilled their negotiated and contracted responsibilities.

- FM100 ran 111 spots as part of the negotiated bonus schedule, which is what was contracted on this portion of the added value. These spots also aired during the specified programming and within the contracted period.
- The rotating banner ads did run throughout FM100.com, totaling 14,500 impressions during the month of schedule, but click-throughs were not able to be tracked for this.
- An e-mail blast was sent to 32,000 subscribers on Wednesday, July 23, 2008, which provided information about the campaign and linked people to the Web site.

The radio spot, Poison Control Center aired a total of 218 times. The total reach and frequency for the radio air schedule on FM100, including the bonus radio spots, came to 19.1% (Reach) with a frequency of 9.1 times. This indicates that **about 96,600 people between the ages of 35-**

54 heard the radio spot a total of 9.1 times during the six-week air schedule. These numbers indicate that FM100 fulfilled their end of the contract.

Media Relations
Vanguard Media Group was able to generate more than $104,000 in publicity for the "Use only as directed" Campaign. The news or publicity value is calculated at three times the advertising value as it is seen as more credible than a paid advertisement.

The campaign initially kicked off on May 1, 2008, with a press event at the State Capitol building. In attendance at the event were the four primary television stations (KUTV, KTVX, KSL and KSTU), the two major statewide newspapers (Salt Lake Tribune and Deseret News), the Standard Examiner (Davis and Weber County), along with KCPW (Radio). Prior to the event, a press kit was developed, which resembled a prescription pain medication bottle with a label appropriate to the campaign. A backdrop banner was also produced with the new logo. Each of the television stations, except for KTVX (Channel 4) ran a news segment later that day or the following day about the start of the campaign. The press kit was also mailed to the Spectrum (St. George), Univision (Spanish), and The Daily Herald (Provo). This later generated a story in the Spanish Fork Press and the St. George Spectrum shortly thereafter.

Shortly after the kick-off press event, KSL's editorial board published an editorial about the need for such a campaign and praised UDOH for addressing this problem. Other opportunities have been pursued by Vanguard Media Group to work with local media outlets to generate stories that support the campaign's efforts. This included a segment on Fox 13's Good Day Utah morning news, which featured discussion about the "Use Only As Directed" campaign, the problems that Utah is experiencing and the need for such a campaign. Another opportunity to speak with the media occurred on June 25 with Rebecca Cressman on FM100. A television segment on Good Things Utah also took place, and footage was also later used on a news story about disposing of Rx pain medications.

Web Site Development
The Web site, useonlyasdirected.org, went live on May 7, 2008. Since its initial implementation, various changes and edits have taken place as feedback has been collected from various entities involved with the campaign, including the Advisory Committee and Patient and Community Education Work Group.

The Web site was programmed with a Web-based Content Management System that allows anyone with the username and password to access the control center of the site and update copy as needed. Vanguard Media Group met with Erin and reviewed how to use the CMS to update the copy. As needed, Vanguard Media Group has made updates to some design portions of the Web site, which are not able to be completed using the CMS.

An e-mail account was also established using Xmission (info@useonlyasdirected.org) to allow users of the Web site to submit questions or comments. Those e-mails are forwarded to useonlyasdirected@utah.gov.

Visitors to the Web site have been tracked since the launch of the campaign. . The statistics show that there were 946 visits in May, 719 in June, 571 in July, 784 in August, and 592 in September. The majority of people entered the URL directly (www.useonlyasdirected.org), while others came from GoogleSearch, KSL, Yahoo and FM100.com. Web site hits will continue to be monitored in conjunction with events and media stories of the campaign.

Collateral Materials
A bookmark, poster, traveling display, PowerPoint template and informational card have been designed, produced, and distributed throughout the state to local county substance abuse coordinators, pharmacies, doctor's offices, provider educators, law enforcement, aging services,

and others. They have been made available to anyone who requests them for the purpose of educating the public, patients, or doctors on the potential dangers of prescription pain medication. A floor decal was also produced and used at the KSL Family Fair booth and the Days of '47 Parade in conjunction with a chalk outline of a body.

Campaign Awareness Week
Prescription Safety Week will take place from October 20-October 26, 2008. Traveling displays will be set up in high traffic areas across the state. Materials will be distributed at pharmacies, doctor's offices, and conferences. An editorial board tour took place in early October to request that a story be run during Prescription Safety Week. Recordings of the radio spot have been sent to all major radio stations requesting PSA's during that week. We are in the process of scheduling a forum that will take place during the week and be played on Channel 17.

D. Research Progress

Progress has been made during the past year. UDOH and DOPL have worked actively to establish a partnership and technical environment to support the analyses needed to meet the legislative direction of HB 137 and provide adequate security for the sensitive data contained in the CSDB. A MOU was signed November, 2007. However, it took several months to determine an adequate technical environment for transferring the sensitive data from DOPL to UDOH and several more months for the actual transfer of data to occur. We received the complete data sets in May, 2008. Once the data was transferred, a team of programmers has had to clean the data in order to make it usable. This has been a great deal of work due to the large number of records in the database and the fact that only limited quality checks are performed on the data as received in the CSDB.

During 2008, we have put together a Research Team with an impressive skill set. This team is capable of the complex programming and analyses required of the data we are using. We anticipate gaining much insight into the problem of prescription drug harm and death during the coming months with this team. Substantial progress has been made on essential steps needed before the research results can be produced. This has included linking the prescription data across individuals (developing a master person index) and organizing the large database for efficient analysis.

E. Research Initiatives

Throughout FY 08, meetings were held by the Prescription Pain Medication Program's IT and Research Team to identify research initiatives that will provide the most useful information toward addressing this problem and preventing future deaths. As noted below, a substantial proportion of decedents had received a prescription for a controlled substance that contributed to their death. However, for a substantial proportion of decedents, the source of the medications and other factors contributing to death were not known from existing data. To address that information gap a new research project was designed to examine risk factors associated with overdose deaths involving prescriptions. This research will take place at the Office of the Medical Examiner. Other research will include looking at emergency department visits related to overdoses of prescription medication. We are developing a systematic way of identifying the cases of interest through Death Certificate and Medical Examiner data. We have brought together a team of talented individuals to work on this topic.

Risk Factor Study
A new research project is being launched to look at risk factors for prescription opioid deaths. This prospective study will collect information on all deaths under the jurisdiction of the Utah Medical Examiner for which drug poisoning (overdose) is suspected as cause of death. The

Office of the Medical Examiner is authorized under Section 26-4-7 of the Utah Code to investigate deaths resulting from poisoning or overdose of drugs. The Utah Medical Examiner, Todd Grey, M.D., will donate time as a sub investigator for this research.

Our investigation will include:

- A standard medical examiner toxicological assay on each decedent
- Review of vital statistics and medical records (available through the Utah Department of Health)
- Interviews with the decedent's next of kin conducted by trained researchers
- Interviews with the decedent's primary physician (when known)
- Interviews with any identified prescribers of controlled substances to the decedent
- Review of relevant medical records during the year prior to death

The study investigators will assure that Medical Examiner investigation results are collected systematically and completely and will also collect supplementary information about the decedent. Our study is patterned after a successful study of suicide using a similar methodology which received approval by the Utah Department of Health and University of Utah IRBs; lessons from that study will inform this study. While the primary focus of the study will be prescription opioids, the methodology will also provide information about illicit drug deaths (heroin) which are also an important Utah and national problem.

Information that will be gathered through interviews includes: whether decedent had a history of substance abuse, circumstances surrounding the death, where the medications were obtained, whether relatives and friends were aware of decedent's problem, reason for medication use (pain vs. recreational), history of mental illness, history of chronic pain and its severity, and the source of opioids if not prescription.

Information that will be collected through toxicological assays or a review of the medical records include: primary and contributing causes of death, manner of death (e.g. accident vs. suicide), time and place of death, dosages of opioids taken, interactions with other medications, interactions with alcohol and illicit drugs, and blood level of medications.

Timetable of Risk Factor Study:

Months 1-12	Gather toxicological data; conduct and transcribe interviews from next of kin and physicians
Months 1-12	Code, review, and analyze qualitative and quantitative data
Month 13-14	Complete report
Month 15	Present research to appropriate parties for creation of meaningful policy and treatment guidelines

Emergency Department Research

During FY08, the majority of our research concentrated on deaths due to overdose of prescription pain medication. We now intend to look more closely at emergency department (ED) encounters. The goal for this part of the research is to better understand the magnitude and importance of

non-fatal overdoses as a consequence of prescription opioid use and abuse. Our primary research questions are:

- How many individuals visit the ED for opioid overdoses?
- What percentage of these individuals has had multiple ED visits for opioid overdoses?
- What percentage of these individuals end up dying from prescription overdose?
- How many individuals who died from prescription overdose had visited the ED for an overdose before death (potential value as warning sign and point of intervention)?
- How many individuals that visited the ED for opioid overdose had a valid prescription at the time of the encounter?

Developing a Case Definition

There is no nationwide, systematic way of measuring deaths due to opioid overdose. Some of the inherent difficulties in comparing Utah to other states are due to the differences between case definitions. Some states may differ on whether they count suicide cases that result from prescription opioid overdose. Others may differ on whether they exclude or include deaths that have prescription opioids in combination with illicit drugs. Research that UDOH has conducted up until now has been based on using a combination of the data we obtain from the Medical Examiner (ME) and from Death Certificates (DC) to determine the number of cases. We have excluded suicides as well as cases that have prescription opioids in combination with illicit drugs in the numbers that we have reported yearly. We are currently in the process of creating a way to systematically pull the cases we are interested in from the ME and DC data. This will make for a much stronger analyses since it will be automated rather than coded by hand each year.

F. Research Findings

Background information

Unintentional fatalities due to prescription medications are an increasing problem in United States and Utah. Over the past few years, the Utah Medical Examiner noted an increase in the number of deaths occurring due to overdose of prescription opioid medications that are typically used for pain management. Epidemiologic studies of data collected by the Office of the Medical Examiner, as well as from emergency department encounters and controlled substances dispensing confirmed the increases and uncovered an alarming problem.

During the years 1997–2004 deaths attributed to poisoning by drugs increased 128% in Utah from 174 to 397. Deaths of Utah residents from non-illicit drug poisoning (unintentional or intent not determined) have increased from about 50 deaths per year in 1999 to over 250 in 2006. The increase was mostly due to the higher number of deaths from prescription opiate pain medications, including methadone, oxycodone, hydrocodone, and fentanyl.

Methadone was the most common drug identified by the Utah medical examiner as causing or contributing to accidental deaths, accounting for a disproportionate number of deaths compared to its frequency of use. Methadone was the single drug most often associated with overdose death and had the highest prescription adjusted mortality rate (PAMR) with an average of 150 deaths for every 100,000 prescriptions during the study period (range: 89 deaths/100,000 prescriptions in 1998 to 224 deaths/100,000 prescriptions in 2004). From 1997–2004, population-adjusted methadone prescriptions increased 727%. This increase in the methadone prescription rate was for treatment of pain and not addiction therapy.

The numbers of prescriptions for four of the primary drugs of concern with respect to fatal drug overdose have increased at a greater rate than the growth of the Utah population. The population-adjusted relative increase in prescribing for methadone and fentanyl exceeded 700% while oxycodone nearly tripled.

For the years 1999–2003, unintentional deaths due to prescription medications were the fourth-leading cause of death in 25–54 year olds in Utah. Notably, while deaths of unintentional or

undetermined intent caused by prescribable narcotics nearly tripled, cases of self-inflicted harm from narcotics remained stable from 1991–2003.

In 2006, methadone was implicated in 30% of non-illicit drug-related deaths, oxycodone in 21%, hydrocodone in 18%, and fentanyl in 9% of deaths associated with non-illicit drug overdose. The average age at death for deaths due to overdose of non-illicit drugs was 42 years old, with the ages ranging from 16 to 80 years old. Rates of death were slightly higher for males (51.3%) than females. At least one death occurred in 24 out of the 29 counties in Utah, suggesting that the problem spans both the urban and rural population.

Research combining Medical Examiner's data and data from the CSDB from 1997-2004 found that 50% of individuals who died of an overdose of methadone had a valid prescription at the time of death. This is informative in showing that there are two distinct populations: individuals with a valid prescription and individuals who found prescription opioids from some other source. To prevent future deaths of individuals with a valid prescription, the approach may be teaching proper use and warning against deviating from the directions given by their doctors, whereas to prevent deaths of individuals who are getting prescription drug from other sources, the approach may be to decrease availability of these drugs (for example, by educating others to lock up or dispose of their leftover medication).

A national report found that among young adults aged 18 to 25 who used prescription pain relievers non-medically in the past year, over half (53.0 percent) reported that they obtained the medication from a friend or relative for free. (National Survey on Drug Use and Health, 2006, retrieved on October 14, 2007 from http://www.oas.samhsa.gov/2k6/getPain/getPain.htm)

Recreational use of prescription drugs is increasing. In 2003, approximately 15 million Americans reported using a prescription drug for non-medical reasons at least once during the year. Approximately 6.3 million Americans reported current non-medical use of prescription drugs. (Office of Applied Studies, Substance Abuse and Mental Health Services Administration, National Survey on Drug Use and Health, 2004)

Abuse of prescription pain killers in the last year now ranks second, following marijuana, as the nation's most prevalent illegal drug problem. Even more foreboding is the fact that the number of new abusers of prescription drugs is equal to the number of new abusers of marijuana. Much of this abuse appears to be fueled by the relative ease of access to prescription drugs. Approximately 60 percent of people who abuse prescription pain killers indicate that they got their prescription drugs from a friend or relative for free. (Office of National Drug Control Policy, 2007, retrieved on October 17, 2007 from http://www.whitehousedrugpolicy.gov/news/press07/022007.html)

Preliminary results from the linked CSDB-Vital Statistics database analysis

For the years 1999-2004, the CSDB includes 22,215,471 records of filled prescriptions. This represents 2,339,058 unique individuals that filled at least one controlled substance prescription. During the same time period, there were 1,920 drug poisoning deaths identified using death certificates. We analyzed the demographics of the decedents and present summary results in Table 1. Intentionality status of the decedents is determined by the medical examiner or certifying official and is captured on the death certificate. Fatal drug overdose is a problem of middle-aged adults, with an average age of 38.8 years. The majority (67%) of drug poisoning where intent was accidental or undetermined were male. The greatest number of deaths occurred in the urban counties of the Wasatch Front where the largest proportion of the population lives, but when death rates are used to account for the population distribution (number of deaths per 100,000 population) this problem was seen to have affected frontier, rural and urban areas of the state similarly.

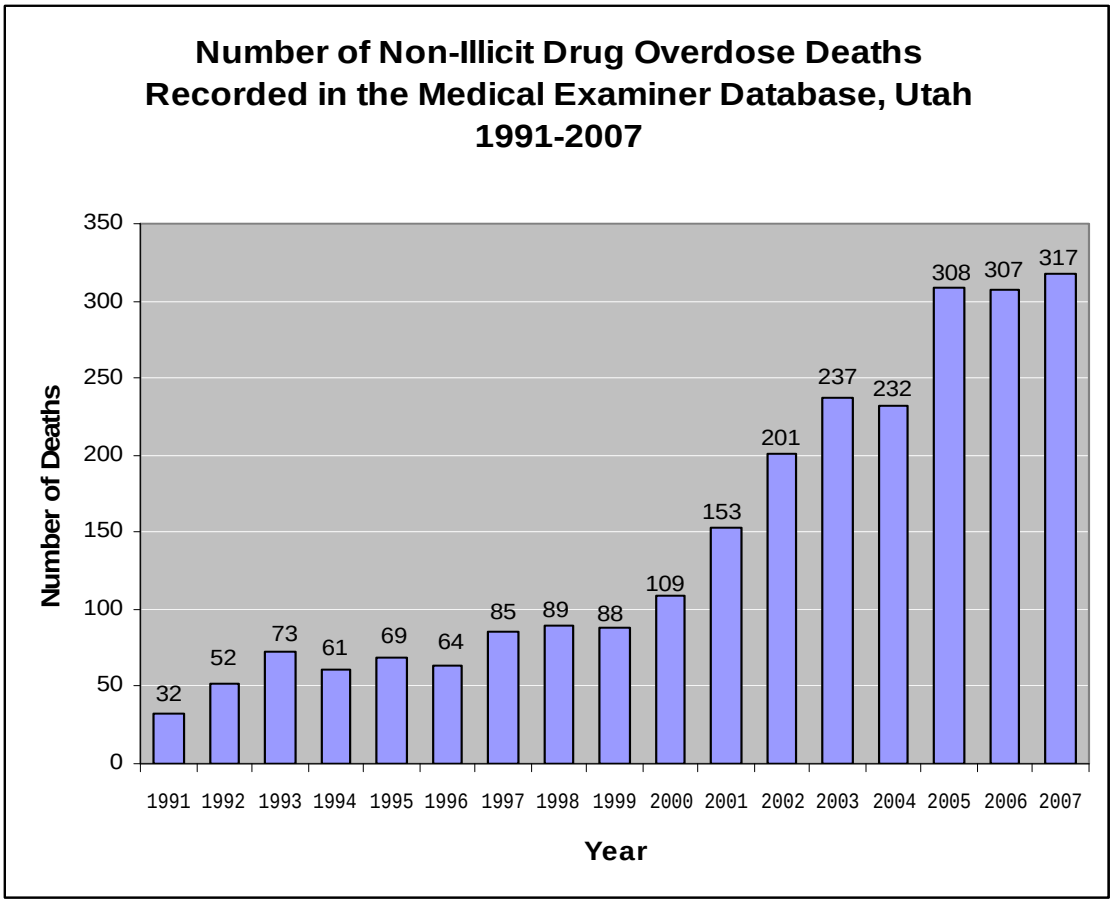
We linked the Medical Examiner Database to the de-duplicated CSDB in order to determine what proportion of the poisoning decedents had ever filled a prescription for the implicated drug and

what proportion had a valid prescription at the time of death or within certain time intervals of death. Among accidental drug poisoning deaths, 40% (101/251) of decedents had received an opioid prescription that would have lasted to within 30 days of death, and 74% (185/251) had ever received an opioid prescription. Among drug poisoning deaths of undetermined intent, 41% (393/967) of decedents had received an opioid prescription that would have lasted to within 30 days of death, and 75% (729/967) of decedents had ever received a prescription for an opioid drug. Decedents with undetermined intent, who had filled prescriptions tended to be older (38.6 years compared to 36.5 years; p=0.0059) than those for whom we found no evidence of prescription. A greater proportion of decedents of unknown intent from non-urban Utah counties had evidence of a prescription (83%) than decedents of unknown intent from urban Utah counties (73%; p=0.0181). No such differences were seen among decedents of accidental intent.

Current Findings

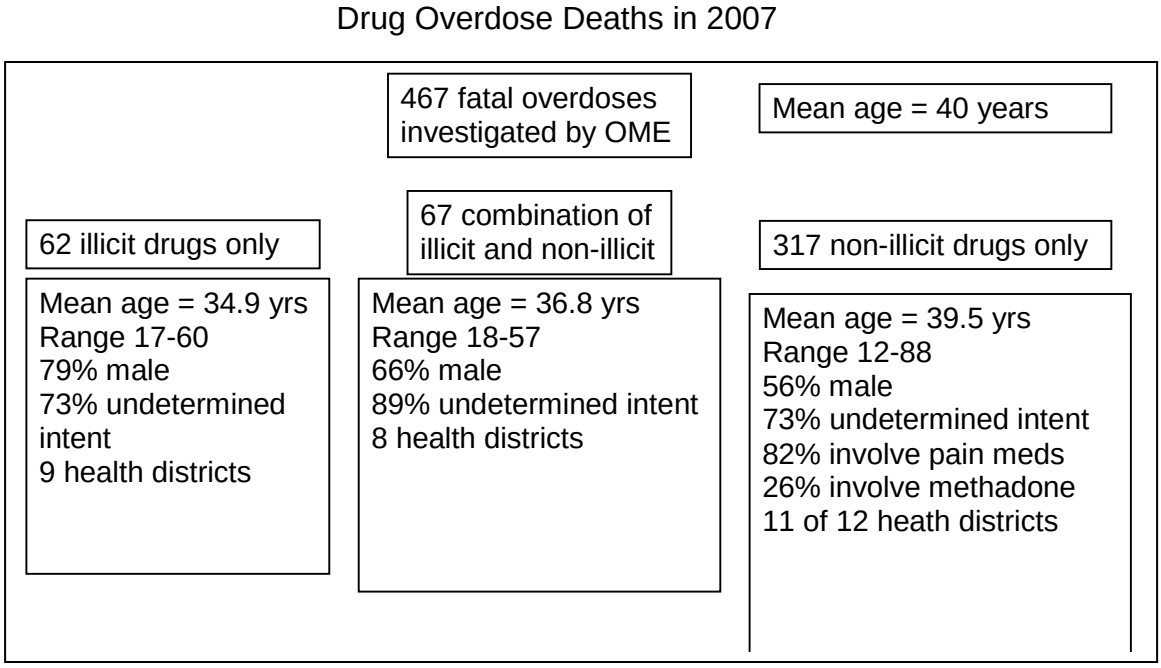
The number of non-illicit drug overdose deaths continues to increase (See Figure 1). In 2007, the number of deaths related to non-illicit drugs was 317. This is the leading cause of injury death in Utah and one of the leading causes of death for 25-54 year olds in Utah.

Figure 1.



In 2007, the Medical Examiner investigated 467 overdose deaths related to drugs of any type. Of these, 62 decedents had strictly illicit drugs appear on the toxicology results while 317 had strictly non-illicit drugs in the toxicology results and 67 decedents had a combination of illicit and non-illicit drugs. The mean age of people who died from a drug overdose in 2007 was 40 years old. The mean age of people who died strictly of non-illicit drugs was higher (39.5 yrs) than those who died of illicit drugs (34.9 yrs) (See Figure 2).

Figure 2.

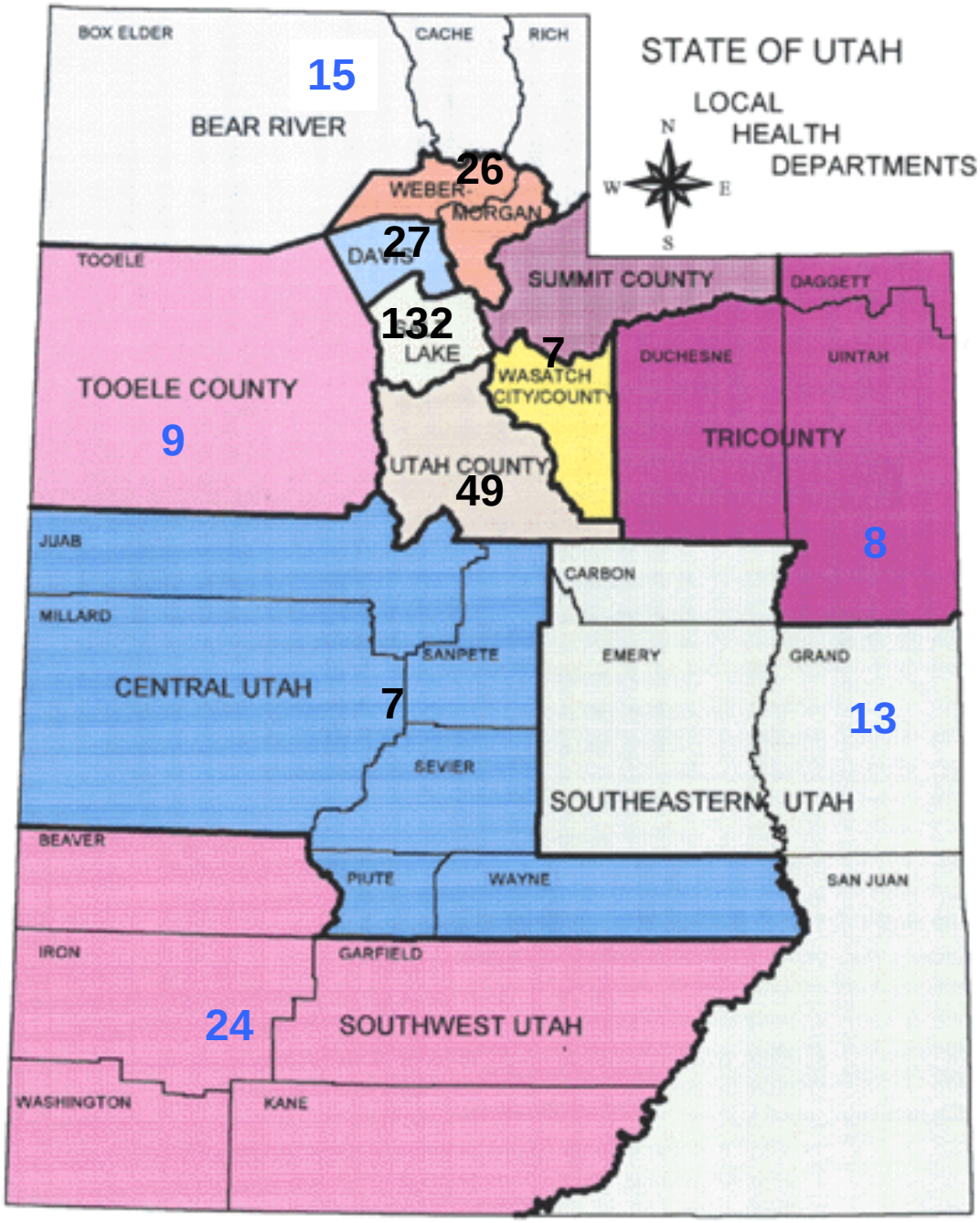


The individuals who died of strictly illicit drugs in 2007 were more frequently male (79%) than those who died of strictly non-illicit drugs (56% male).

Deaths from non-illicit drugs only occurred in 11 of the 12 health districts showing that this is both an urban and rural problem and that it is impacting most counties across the state (See Figure 3).

Figure 3.

Non-Illicit Overdose Deaths by Health District, 2007



Emergency Department encounters related to opioids have also had a steady increase over the past few years (See Figures 4 and 5).

Figure 4.

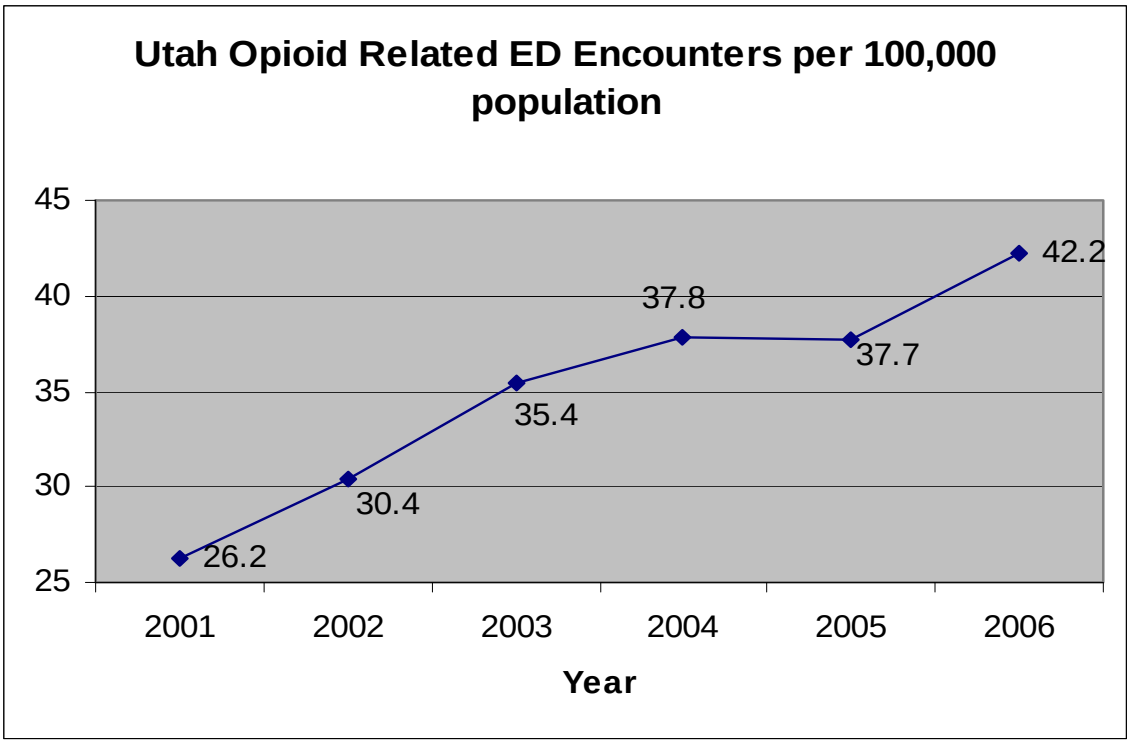


Figure 5.

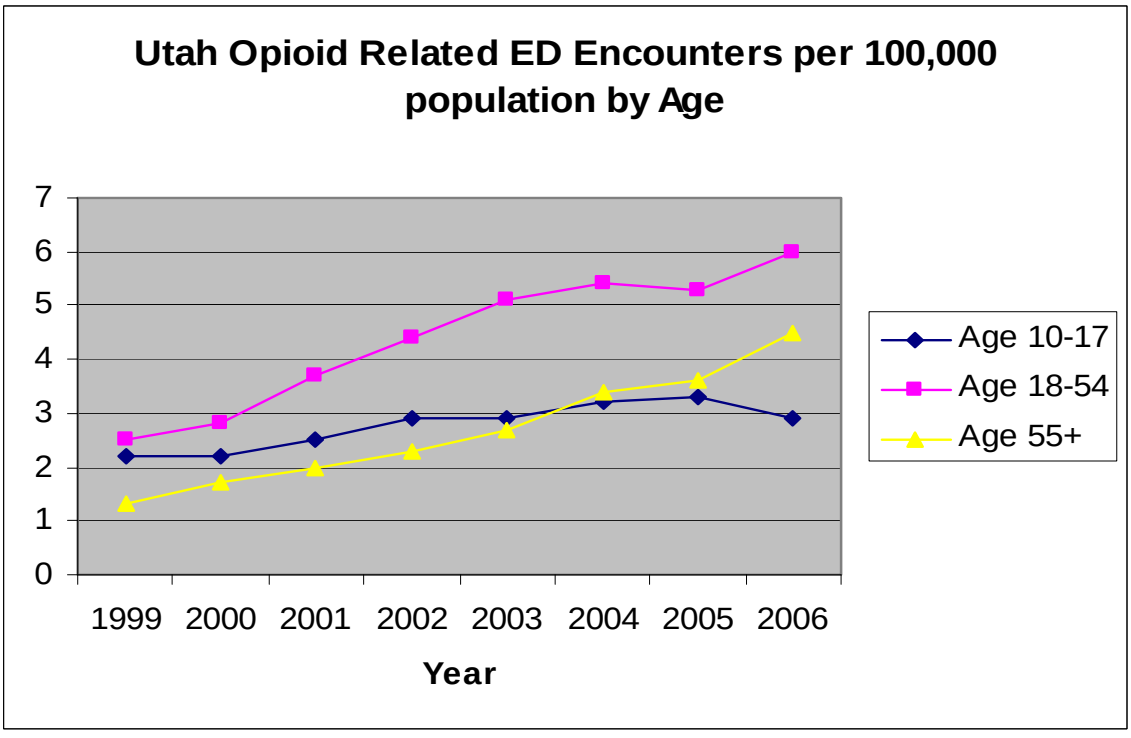


Figure 6.

Percentage of Accidental and Unknown Opioid Poisonings Deaths by Month (1999-2005)

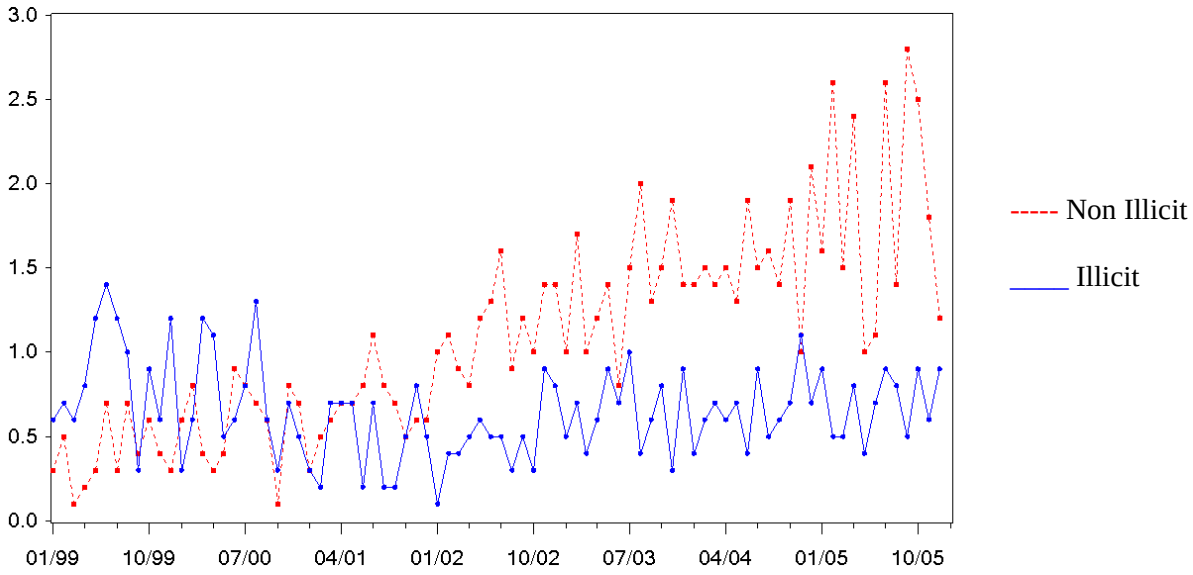
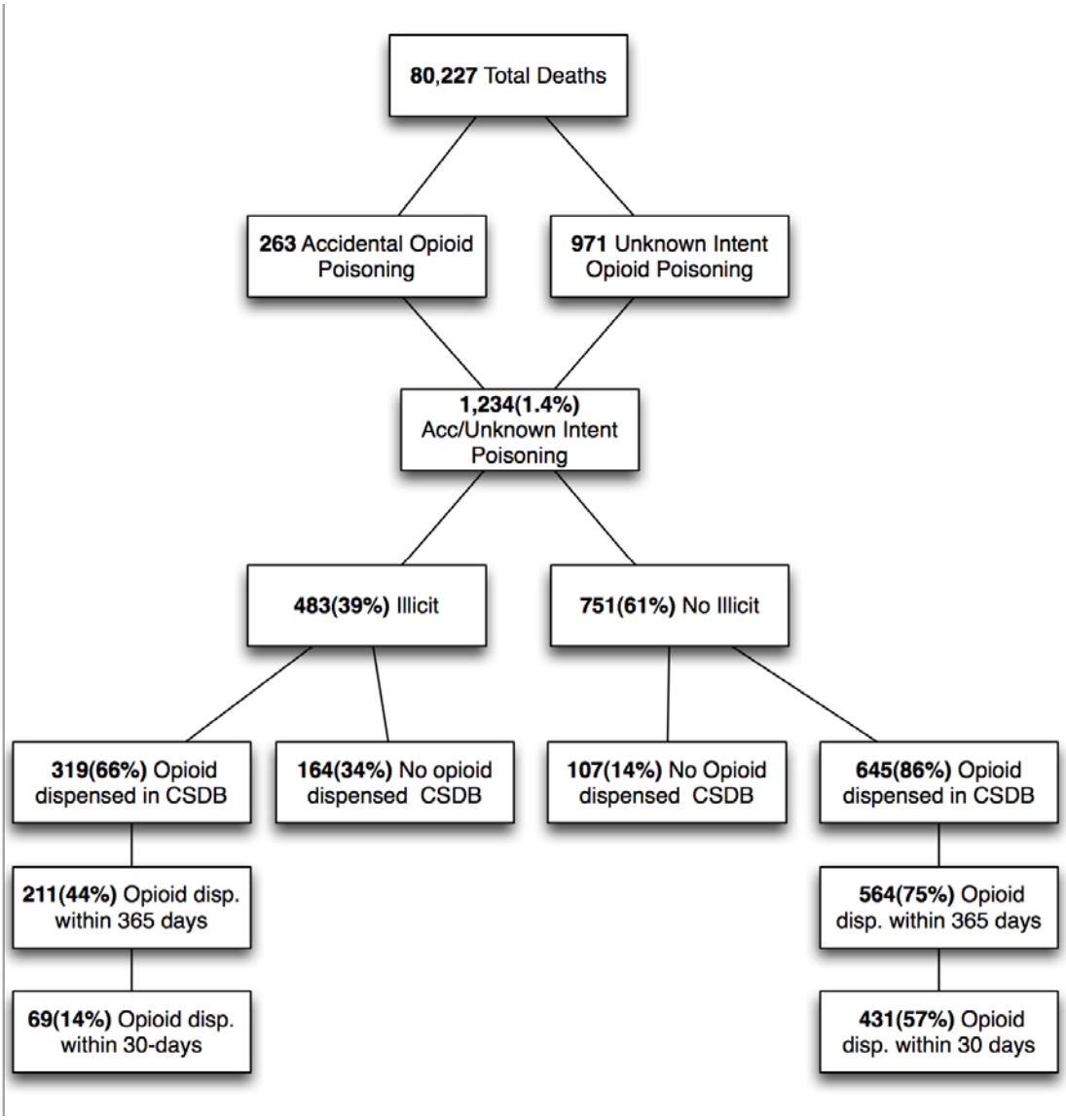


Figure 6 illustrates the percentage of total deaths identified as being opioid poisonings of accidental or unknown intent. The blue solid lines represents accidental and unknown intent poisonings where illicit drugs were found on toxicology and the red dashed line represents the same category of deaths where no illicit drugs were found on toxicology. It is easy to notice that opioid poisonings of accidental and unknown intent where illicit drugs were found on toxicology have remained relatively constant over the seven year period while the same category of poisoning deaths where no illicit drugs were found on toxicology has been steadily increasing since 2001.

Figure 7.

Breakdown of Accidental and Unknown Opioid Poisonings Deaths and Evidence of legal Access to Opioid Medications. (1999-2004)



During the years of 1999 to 2004 there were a total of 80,227 deaths, of which 263 were identified as accidental opioid poisonings and 971 were identified as opioid poisoning with unknown intent resulting in 1,234 apparently non-intentional opioid poisonings. In 483 (39%) of the accidental and unknown opioid poisoning deaths illegal substances (e.g., cocaine, methamphetamine, marijuana) were found during toxicology examination, and in 751(61%) no illegal substances were found. 69 of the 483 (14%) accidental and unknown opioid deaths with illicit drug use had at least one opioid dispensed where the supply would have ended within 30-days of death if the drug was used as prescribed, while 431 of 751 (57%) of the non-illicit group had at least one opioid dispensed where the supply would have ended within 30-days of death.

F. Work Groups and Number of Participants

1. Steering Committee: 11 members; meet monthly
2. Advisory Committee: 107 members; meet quarterly
3. Patient & Community Education Work Group: 43 members; meet monthly
4. Policy, Insurance, & Incentives Work Group: 19 members; meet monthly
5. Data, Research, and Evaluation Work Group: 8 members; meet as-needed
6. Guideline Expert Panel: 16 members; met throughout April-June to develop draft of guidelines
7. Guideline Implementation Panel: 14 members; met in July to determine which tools to include in guidelines

V. Budget

A. Funding 2008

	FY 08
Labor Commission	$250,000
Legislative Appropriation	$150,000
Workers Compensation Fund of Utah	$77,000
U of U, Research Center for Excellence in Public Health Informatics	$23,000
Total	$500,000

B. Funding 2009

	FY 09
Labor Commission	$250,000
Legislative Appropriation	$150,000
Division of Substance Abuse and Mental Health	$170,000 (pending)
Commission of Criminal and Juvenile Justice	$37,142 (pending)
Total	~$607,142

C. Itemized Budget Detail for 2008

Item	**Cost**
Personnel	$78,901
Office Expenses	$16,135
Contracts:	
Physician Education	$200,000
Media Campaign	$143,553
Research	$47,505
BRFSS Survey	$7,970
Total	$209,750

D. Narrative of Budget Detail

Costs listed under “Personnel” include expenses for one full-time program manager, one part-time director, and one part-time intern.

Office Expenses include in and out-of-state travel, postage, phone, office supplies, cubicle space, printing, books and subscriptions, photocopies, insurance and bonds, workshops and conventions, purchase of external hard drive to store CSDB data on, software for analyzing data and creating websites, and network costs.

The physician education contract includes 30 small group and 10 large group presentations to physicians throughout the state. The costs will also go toward statewide mailings and addresses at conferences on the subject of Safe Prescribing of Opioids. For a detailed breakdown of expenses related to the physician education contract see Appendix 1.

The media campaign contract includes costs for agency labor, public opinion survey, focus groups, tv and radio spot productions, tv and radio air time, media relations, web site development, advertising, collateral material, and communication plan. For a detailed breakdown of expenses related to the media campaign see Appendix 2.

Research costs went to pay one research consultant for work analyzing data from the Controlled Substance Database and Medical Examiner and Vital Statistics records and two programmers who worked on cleaning and merging the data.

BRFSS (Behavioral Risk Factor Surveillance System) Survey is a statewide, telephone survey. The costs went toward 9 additional questions put at the end of the standard survey that ask specifically about prescription pain medication use. Results from this survey will be available at the end of 2008.

APPENDIX A—Guideline Rating Scale

10/10	• *Extremely* explicit evidence-based guidelines • The "gold standard" • Evidence has been analyzed thoroughly through an explicit rating system • Recommendations are based on the evidence with the highest rating of quality • Expert consensus creates the recommendations, • Recommendations verified through a peer review
9/10	• *Very* explicit evidence-based guidelines • Evidence has been analyzed thoroughly through an explicit rating system • Recommendations are based on the evidence with the highest rating of quality • Expert consensus creates the recommendations
8/10	• Explicit evidence-based guidelines • Evidence has been analyzed thoroughly through an explicit rating system • Expert consensus
7/10	• Evidence-based guidelines • No record of the evidence from which the guidelines have been created is present • No rating system of the evidence is present either
6/10	• Evidence-based guidelines • *Limited details* to how they were created • No record of the evidence from which the guidelines have been created is present • No rating system of the evidence is present either
5/10	• Expert consensus statement only • *Very* detailed explanation of how the consensus was formed • Reviewed thoroughly by pain experts
4/10	• Expert consensus statement only • Detailed explanation of how the consensus was formed
3/10	• Expert consensus statement only • Little explanation of how the consensus was reached
2/10	• Expert consensus statement only • No explanation of how the consensus was reached
1/10	• No explanation of how guidelines were created

APPENDIX B—Guideline Panel

Steering Committee
Chair: Robert Rolfs, MD, MPH, Bureau of Epidemiology, Utah Department of Health
Noel Taxin, Utah Division of Occupational and Professional Licensing
Kim Bateman, MD, HealthInsight
Martin Caravati, MD, MPH, Utah Poison Control Center
Alan Colledge, MD, Utah Labor Commission
Perry Fine, MD, Professor of Anesthesiology, Pain Research Center
Teresa Garrett, RN, Division of Epidemiology & Laboratory Services, Utah Department of Health
Craig PoVey, Division of Substance Abuse, Utah Department of Human Services
Doug Springmeyer, Attorney General's Office
Terri Rose, HealthInsight

Guideline Recommendation Panel
Marc Babitz, MD, Primary Care*
Jay Aldous, Dental
John Barbuto, MD, Neurology
Alan Colledge, MD, Occupational Medicine
David Cole, MD, Emergency Medicine
Michael Crookston, MD, Psychiatry
Robert Finnegan, MD, Anestesiology
Kathy Hogan, Primary Care
Jerry Shields, Pharmacy
Roger Stuart, Occupational Medicine
Peter Taillac, Emergency Medicine
Lynn Webster, MD, Pain Management

Implementation & Tool Panel
Kim Bateman, MD, Family Practice*
Bennion Buchanan, MD, Emergency Medicine
Mark Foote, MD, Psychiatry
Edward Holmes, MD, Occupational Medicine
Kathy Goodfellow, PharmD, Pharmacy
Mark Lewis, MD, Internal Medicine
Kerry Strateford, MD, Family Practice
Tom Kurrus, MD
Robert Rolfs, MD, Internal Medicine

*****Indicates panel chair